

REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

The Applicants acknowledge with thanks the Examiner's indication that claims 37-43 are free of the art and that claim 16 would be allowable if amended to incorporate the limitations of claim 37. The claims have been so amended.

Specifically, claim 16 has been amended to recite the limitations of claim 37. Claim 37 has been cancelled without prejudice, and claim 38 has been amended as kindly suggested by the Examiner.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "Version with markings to show changes made."

In view of the foregoing, it is believed that each ground of objection and rejection set forth in the Action have been overcome. Accordingly, favorable consideration and allowance are solicited.

Respectfully submitted,

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May 30, 2002



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

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Jacques DEGELAEN et al.

:

JUN 03 2002

Serial No. 09/276,923

:

Group Art Unit 1645

TECH CENTER 1600/2900

Filed March 26, 1999

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Examiner R. Zeman

PROCESS FOR DETERMINING ANTIBIOTICS
CONTAINING A B-LACTAM RING IN A BIOLOGICAL FLUID

AMENDMENT

Assistant Commissioner for Patents,
Washington, D.C.

Sir:

Responsive to the Official Action dated March 27, 2001, please amend the above-identified application as follows:

IN THE CLAIMS

Cancel without prejudice claims 1-15 and substitute in their stead the following new claims:

(Amended)
16. A process for detecting an antibiotic or antibiotics containing a β -lactam ring in a biological fluid, comprising the steps of:

(a) placing a determined volume of the biological fluid in contact with an amount of recognition agent to form a mixture, and incubating the mixture under conditions which allow for the formation of a complex between an antibiotic or antibiotics, which may be present in the biological fluid, and the recognition agent,

(b) placing the mixture obtained in step (a) in contact with at least one reference antibiotic which has been immobilized on a solid support, under conditions which allow the

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reference antibiotic to form a complex with the recognition agent which is not complexed with the antibiotic or antibiotics in the biological fluid, and

(c) detecting the antibiotic or antibiotics by determining the amount of the recognition agent complexed to the immobilized reference antibiotic in step (b),

wherein the recognition agent comprises a receptor which specifically binds to antibiotics containing a β -lactam ring and is obtained from *Bacillus licheniformis*, ~~and~~

wherein the amount of the recognition agent which has been complexed in step (b) with the reference antibiotic is inversely proportional to the amount of the antibiotic or antibiotics present in the biological fluid, ~~and~~

wherein the antibiotic or antibiotics are detected in 5 minutes or less.

17. The process according to Claim 16, wherein the receptor which specifically binds to antibiotics containing a β -lactam ring is the BlaR receptor or the BlaR-CTD receptor.

18. The process according to Claim 16, wherein the receptor which specifically binds to antibiotics containing a β -lactam ring is coupled to a labelling agent selected from the group consisting of metallic colloidal particles, colloidal particles of selenium, colloidal particles of carbon, colloidal particles of sulphur, colloidal particles of tellurium, and colloidal particles of colored synthetic latices.

19. The process according to Claim 16, wherein the receptor which specifically binds to antibiotics containing a β -lactam ring is coupled to a labelling agent which is a fluorescent substance.

20. The process according to Claim 16, wherein the receptor which specifically binds to antibiotics containing a β -lactam ring is coupled to a labelling agent which is an enzyme.

21. The process according to Claim 20, wherein the receptor which specifically binds to antibiotics is chemically or genetically coupled to the enzyme.



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~~37. (New)~~ A process according to claim 16, wherein the antibiotic or antibiotics may be detected in 5 minutes or less.

(Amended)

38. ~~(New)~~ The process according to claim 16, wherein the antibiotic or antibiotics ^{*are*} ~~may be~~ detected in 3 minutes.

39. (New) The process according to claim 16, wherein the antibiotic or antibiotics is at least one of penicillin G, ampicillin, amoxycillin or cloxacillin.

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